gardener "Week by Week" from early February through October. Beginning with directions for planning various types of gardens and the buying of seed in February, the starting of seeds indoors in March, and all the outdoor work from April on the book is for gardeners who do all their own work in small gardens. The book will be valuable for the beginner starting her first garden and with no knowledge of how to proceed, also for the more seasoned gardener who wishes a more successful garden than in the past. The preface is a gem in itself, as witness—"Growing plants is a vice that attacks at any age; there is no cure, and the victim may as well realize that she will always have a lame back and dirty hands—but a beautiful disposition, if she is not called in to answer the telephone!"

The second book by Mrs. Abbott is for "The Indoor Gardener." Simple, easily-followed directions are given for all the work necessary for successfully growing plants in pots or boxes in the house. The plants described are the ordinary ones that everyone can secure and grow. There is advice on how to care for gift plants and how to grow miniature gardens under glass. Eighty drawings aid in the identification of common house plants. In addition there are formulas for insect sprays and for fertilizers. The book is attractively printed and bound and will be a delight as well as a guide to all those who try to keep plants in good condition in their homes.

## FIELD TRIPS OF THE CLUB

TRIP OF MARCH 8 TO PINE BROOK, N. J.

The rally trip scheduled for Sunday, March 3, was postponed because of snow, and held the following week in a temperature that hovered about the freezing point, aggravated by a violent gale. After a few hours, the eight members present found conditions unbearable, and the trip was abbreviated. Mr. Beals reported no mosses except what would be expected in that area. The fungi were few and of little interest.

Lichens were better represented. The many fine specimens of *Ilex opaca* in Hockhockson Swamp had their bark covered with

Trypethelium virens. On the way back to Pine Brook a White Oak was found harboring a large patch of Lecanora miculata near the root. This species had been reported from North America by Muhlenberg. It was described by Acharius in 1814. Tuckerman and Fink both record the local material as doubtful, but authentic specimens have been found in the southern states, and in Ohio. No material properly belonging to this species, however, had been collected in New Jersey or in any neighboring state. The writer's determination has been confirmed by Dr. Albert W. Herre and Dr. David H. Linder.

Cold fingers making further collection impossible, what was left of the party found a restaurant in Pine Brook where specimens could be examined and discussed while waiting for an excellent dinner of fried chicken, and the northbound train, stopped for us by the district superintendent in person.

G. G. NEARING

# TRIP OF MARCH 17 TO ARDEN, N. Y.

Despite a sleet storm the previous day, and a foot to two feet of snow with an ice crust over the trails, four hardy souls went collecting lichens of the Hudson Highlands along the trail past Island Pond and over Hogencamp Mountain. On starting up the road beside the elk range, two Physcias, the olive-brown Physcia obscura and the slate gray Physcia tribacia were collected at the base of a white oak. Cladonia delicata f. quercina and Cladonia coniocraea f. ceratodes flourished on a stump which was projecting through the snow. Up on top of the hill overlooking the Ramapo valley the rock tripes, Gyrophora Dillenii and Umbilicaria pustulata grow on the exposed rocks of the summit.

At the outlet of Island Pond the sun had melted away the snow in a few places to expose Cladonia papillaria f. molariformis, Cladonia caroliniana f. dilatata, Lecidea albocaerulescens, and Parmelia conspersa. On trees along the trail were seen several other Parmelias including P. sulcata, P. saxatilis, P. olivacea, and P. conspurcata.

The "Lichen trail" over Hogencamp Mountain goes through a large colony of the "Iceland Moss," Cetraria islandica, discovered

by the late Raymond H. Torrey who inspired many of the local students of lichens. By digging through the snow in an appropriate spot, enough of the *Cetraria* was brought up to convince one of its existence under the winter cover. In addition to the two commoner species of rock tripe, *Gyrophora Muhlenbergii* and *Umbilicaria pennsylvanica* were collected on the projecting rocks. These also harbored *Biatorella simplex*, *Acarospora fuscata*, *Stereocaulon paschale*, *Lecanora rubina*, and *Rinodina oreina*. *Alectoria chalybeiformis*, *Cetraria Oakesiana*, and *Parmeliopsis aleurites* grow on the trees along the trail.

On the return trip, a small amount of Baeomyces roseus was dug out of the snow on the dirt road leading into Island Pond and an exposed road-cut which had melted out during the day yielded several more lichens, including Cladonia bacillaris f. clavata, Cladonia coniocraea f. ceratodes. Cladonia chlorophaea ffs. simplex and carpophora, Cladonia furcata var. pinnata f. foliolosa, Cladonia cristatella f. vestita, and Cladonia pleurota.

John W. Thomson, Jr.

## TRIP OF MARCH 31 TO FLOYD BENNETT FIELD

Salt marshes are perhaps the least affected by adverse climatic conditions of any of our native habitats and are interesting throughout the year. The winter season really has one advantage in that there are no mosquitoes. The area which was visited—salt marshes west of Flatbush Avenue, Brooklyn—is one of the very last bits of natural terrain within the limits of New York City, but with the projected improvements in connection with Marine Park this wild condition will probably not endure. On the elevated portions of the salt marsh can be found a good growth of Baccharis and Iva, our two shrubby composites. There are plants of seaside goldenrod, a peculiar Lactuca, various grasses and sedges, and in the fall the marsh borders are rimmed with Sabatia stellaris. One of these little islands is a miniature sand dune covered with Hudsonia tomentosa, associated with Cyperus Gravii and Carex silicea. The remains of Salicornia europaea and the perennial S. ambigua were here in abundance, also Atriplex patula, A. arenaria, and Suaeda linearis. Distichlis spicata and Juncus Gerardi form the chief grass-matting of the salt marsh. In the wetter places there is plenty of Spartina glabra var. alterniflora; this flowers when only a few inches high at the sandy borders of the marsh, whereas the same species may begin to flower when four or five feet in height in the deep waters of creeks. Spartina patens is abundant in moist places, with the coarser var. juncea usually occupying crests of dunes. Eragrostis spectabilis is one of the most abundant grasses, turning bright red in late fall. Limonium (sea lavender) and Phragmites are abundantly represented, as they are at the borders of practically every salt marsh.

It may be added that the vegetation of the salt marsh is one of the most difficult from the point of view of species identification. It has not been well studied, and the amateur can add a great deal to the information given in manuals. Ten members of the club enjoyed the trip.

Henry K. Svenson

# TRIP OF MARCH 31 TO MAHWAH, N. J.

On Sunday, March 31, eleven members undeterred by a night of storm, a rainy morning and a forecast of rain, climbed the Ramapo ridge near Mahwah, N. J. Most of the twenty-five species of Cladonia recorded from that area were collected, and a number of other lichens characteristic of that district. Mosses were plentiful, but nothing rare encountered. Fungi were not much in evidence.

Because of flood water the small bogs, of which there were a number nearby, could not be explored. The flora of the stream bed was also submerged.

Cladonia piedmontensis, a lichen not previously reported from the neighborhood, and known from only three other counties in the state, was found. It is not rare, but rather local, and little known. Mr. Beals reported no important mosses.

# Trip of May 5 to Croton Lake, N. Y.

Ten members and friends met near Croton Reservoir not far from Ossining for this trip. Arrangements were about the same as last year for the visit to this attractive region with its tumbling brook, small clear lake and wooded rocky hills. As Dr. Moldenke who led the trip last year was ill, the trip was led by the undersigned. Plants seen were much the same as before, though due to the cold weather many of those seen in blossom in 1939 were only in bud

this year. Among these were the wild geranium, sessil-leaved bell-wort, blue cohosh, columbine, and shad bush. Sixteen ferns were seen, except for those with evergreen leaves, all in the fiddle-head stage. Fronds of the rattlesnake fern, Botrychium virginianum, were pushing their folded sterile leaves through the soil, or were straightening out and unfolding. Botrychium obliquum and the variety dissectum had last year's leaves still showing. In the stream bed Conocephalum was found with the fruiting stalks and pendant capsules fully developed. Attention was directed to the plants with imperfect flowers, either monoecious or dioecious—the aspen, sweet fern, bayberry, blue beech (Carpinus) and hop hornbeam (Ostrya) growing close together and giving splendid opportunity for comparison, red maple, spice bush, pussy toes (Antennaria plantaginifolia) and others.

#### WEEK-END TRIP OF MAY 3 TO 5 TO MOHONK LAKE

The outstanding impression of this trip was the lateness of the spring. The last of the ice had disappeared from Mohonk Lake on April 29. Bird arrival dates have averaged later than the latest previous date during fifteen years of observation and few individuals have been present of most species. First flower dates were equally behind. Arbutus was at its height and very abundant. Shadbush and violets were not yet out.

Saturday's walk was down the east side of the mountain. On the way, in a north sloping ravine, considerable porcupine damage was noted. A previous survey had shown that all twenty-six trees from which bark had been eaten in this mixed second growth stand were hard maple. The threatening showers held off until we were eating our lunches in a log cabin. A visit was made to one of the Mohonk dairy farms where both Guernseys and Shorthorns are kept.

For those who did not wish to go out for an all-day walk, Mrs. A. Keith Smiley, Jr., conducted an afternoon walk. In the garden a beautiful specimen of Cornelian Cherry (*Cornus mas*) was seen.

In the evening we enjoyed an informal concert given for the Mohonk School Spring Carnival.

Sunday morning started with a before-breakfast bird walk. Later we headed for Rhododendron Swamp where we found red trillium and marsh marigold just coming out. Many other spring flowers were well started but not yet in bloom.

We had the unexpected treat of seeing *Corema conradii* in bloom. A specimen collected the previous Saturday on Gertrude's Nose south of Minnewaska had come out in water.

DANIEL SMILEY, JR.

# Trip of May 17-19 to Branchville, N. J.

This sixteenth Nature Conference of the Club was most successful. Seventy-eight persons were present for some or all of the trips. The season, due to the cool weather, was about two weeks late. Thus a few hepaticas (Hepatica triloba) were still in bloom, a patch of arbutus (Epigaea repens) had some of its fragrant flowers, the purple clematis (Clematis verticillaris or Atragne americana) was at its best with the bluish purple flowers trailing over the limestone rocks, and columbine (Aquilegia canadensis) had not reached the height of its bloom. The scarlet painted cup (Castilleja coccinea) which has been found in some fields in abundance in other years was not yet in blossom and the pink lady's slipper (Cypripedium acaule) and the showy orchid (Orchis spectabilis) showed only small buds. About some of the ponds visited the prickly ash or toothache-tree (Zanthoxylum americanum) had both the staminate and pistillate plants covered with the small flowers. Professor Medsger who led trips each day reports "The fronds of the fine colony of Goldie's fern were just pushing through the earth, apparently only one plant remains of the cluster of ostrich fern back of the hotel. In the talus at the foot of the cliff along the lake we found several plants of the bladder fern (Cystopteris bulbifera); apparently this is the first time this has been reported from The Pines, although I have found it west of Newton only a few miles away. Another plant new to the region and possibly to the state, is the European pepperwort (Marsilia quadrifolia). A small, but healthy colony is growing in the shallow water near the north end of the lake back of the inn. It would be interesting to know how this plant became established at Branchville—was it transplanted by human agency (no one at the inn knows of its coming) or were spores carried in mud on the feet of birds, or by some other means. The cluster of yellow lady's slipper (Cypripedium parviflorum) in

the woods near the hotel is increasing. We counted eighteen flowering plants. The area about The Pines is a fine example of what protection can do for our wild flowers. I first went to this spot in 1921, later I had the pleasure of assisting Dr. Gleason with the first Torrey Club trip on May 14-16, 1925. I have observed the gradual increase of a number of wild species of which the yellow lady's slipper is an example."

Dr. John Thomson, who led trips chiefly for the study of lichens, reports "On the two lichen trips to Stokes State Forest on Saturday a fine number of lichens was seen. A clay bank by the roadside yielded Cladonia cristatella f. vestita, C. macilenta f. styracella, C. subcariosa f. evoluta, C. squamosa, C. mitrula ffs. imbricatula and pallida, C. chlorophaea ffs. simplex and carpophora, C. furcata var. pinnata f. foliosa and C. verticillata f. evoluta. Nearby trees bore a rich flora on their barks including: Parmelia rudecta, P. olivacea, P. physodes, P. conspurcata, P. caperata, Physcia endococcinea, P. tribacia, P. obscura, Lecanora subfusca, Cetraria Oakesiana, Graphis scripta and an undertermined species of Buellia. Further along the road Peltigera canina and an abundance of the small lobes of P. spuria were discovered, the latter growing in especially large quantities in old burned places. Many of the boulders were covered with Parmelia conspersa and Lecidea albocaerulescens, and pebbles were often covered with a Lecidea, probably L. parasema. Cladonia caespiticia and C. delicata f. quercina were found on rotting logs. On the exposed rocks towards the top of Sunrise Mt. (1,640 feet) the rock tripes, Gyrophora Dillenii, G. Muhlenbergii and Umbillicaria pustulata were abundant, together with Rinodina oreina and Biatorella clavus. Soil pockets between the rocks and among huckleberry and blueberry shrubs supported Cladonia sylvatica, C. caroliniana, C. papillaria ffs. molariformis and papillosa, and Baeomyces roseus.

On the trip on Sunday to near Newton a few more species were obtained. *Dermatocarpon miniatum* and *Caloplaca cinnabarina* grew on limestone rocks. *Anaptychia speciosa* and *A. aquila* were collected on mosses and earth over the rocks."

Mr. William Hassler led trips to study amphibia and reptiles and reports that the following were found on the trips: Salamanders—Newt and Eft (*Triturus viridescens*), Spotted (*Amblystoma maculatum*), Jeffersons (A. jeffersonianum), Marbled

(A. opacum), Slimy (Plethodon glutinosus), Red-backed (P. cinereus), also the Gray phase of the Red-backed, Red (Pseudotriton ruber) and Long-tailed (Eurycea longicauda). Turtles—Spotted (Clemmys guttata) and Painted (Chrysemys picta). Frogs—Green (Rana clamitans), Bull (R. catesbiana), Pickerel (R. palustris), Spring Peeper (Hyla crucifer), Gray Tree Toad (H. versicolor) and Cricket (Acris gryllus). Snakes—Black (Coluber constrictor), Milk (Lampropeltis triangulatum), Water (Natrix sipedon) and Garter (Thamnophis sirtalis).

Mr. Russell Evans led five bird hikes and reports the greatest number of birds seen in any recent year—107 species with the following recorded for the first time at one of the Torrey Club Branchville outings: Horned Grebe, American Merganser, Red-breasted Merganser, Ruffed Grouse, Common Loon, and Scaup Duck.

On Friday evening Mr. Hastings showed colored movies taken the past winter and spring in Florida and South Carolina and Professor Medsger gave an illustrated lecture on astronomy. Saturday evening Mr. Hassler talked on Exploring Near Home, showing most unusual movies of frogs, salamanders and snakes and of children collecting and studying them.

As in other years the arrangements at The Pines for the convenience of the Club were perfect, and our thanks are again extended to Mr. Husk and Mrs. Smith for their preparation for us and their thoughtfulness for our comfort.

G. T. Hastings

### PROCEEDINGS OF THE CLUB

### MINUTES OF THE MEETING OF MARCH 20

The meeting of the Torrey Botanical Club held at the New York Botanical Garden was called to order by the President, Dr. B. O. Dodge, at 3:30 P.M. The chair was given to the Vice-President, Mr. George T. Hastings, who presided at the meeting.

Twenty-nine persons were present.

The minutes of the meeting of March 5 were approved as read. Thirteen candidates were elected to annual membership: Dr. Valentine Collamer Baker, 619 West 140th St., New York; Miss Helen Berdan, University of Western Ontario, London, Ontario,